Notice of Allowability	Application No.	Applicant(s)	
	10/731,570	WALKER ET AL.	
	Examiner	Art Unit	
	Curtis B. Odom	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Amdt filed on 11/23/07*.

2. ☒ The allowed claim(s) is/are *1-5,7-9 and 12-19*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance: Claims 1-5, 7, and 8 are allowable over prior art references because related references do not disclose all the limitations of the claims, particularly, at least one maximum ratio combiner circuit that receives the wireless information from a plurality of communication channels, wherein the output of the maximum ratio combiner is communicated to a forward error correction circuit, the output of which is communicated to a channel decoder select circuit; a pseudo bit error measurement feedback signal communicated to the maximum ratio combiner from one of the plurality of channel decoder circuits; and a switch connected at the input of the forward error correction circuit that switches between the output of the maximum ratio combiner circuit and a first communication channel of the plurality of communication channels. Claims 9 and 12 are allowable over prior art references because related references do not disclose all the limitations of the claims, particularly, at least one maximum ratio combiner circuit that receives the wireless information from a plurality of communication channels, wherein the output of the maximum ratio combiner is communicated to a forward error correction circuit, the output of which is communicated to a channel decoder select circuit; a pseudo bit error measurement feedback signal communicated to the maximum ratio combiner from one of the plurality of channel decoder circuits; wherein at least one of the wireless signals received by the plurality of communication channels is processed by a forward error correction circuit, an encoder, a hard detection circuit, a pseudo bit error rate circuit, and a weighting algorithm. Claims 13-15 are allowable over prior art references because related references do not disclose all the limitations

of the claims, particularly, receiving at least a first signal from the plurality of signals from a first communication channel of the plurality of channels at the an input of at least a second forward error correction circuit; providing an output signal from at least the first forward error correction circuit and the at least a second forward error correction circuit to a forward error correction select circuit, wherein the forward error correction select circuit determines an output signal that contains a minimum number of decoded errors; developing a pseudo bit error measurement feedback signal; and providing the pseudo bit error measurement feedback signal communicated to the maximum ratio combiner from the second forward error correction circuit. Claims 16 and 17 are allowable over prior art references because related references do not disclose all the limitations of the claims, particularly, a plurality of convolutional decoders in communication with respective convolutional encoders, the convolutional decoders being configured to receive wireless signals; a plurality of pseudo bit error circuits in communication with the plurality of convolutional encoders and configured to receive the wireless signals; a maximum ratio combiner configured to receive output signals from each of the plurality of convolutional decoders and each of the plurality of pseudo bit error circuits; and a reed-solomon decoder configured to process the output of the maximum ratio combiner. Claims 18 and 19 are allowable over prior art references because related references do not disclose all the limitations of the claims, particularly, at least one maximum ratio combiner circuit in communication with a forward error correction circuit, the output of which is communicated to a channel decoder select circuit; and a plurality of channel decoder circuits in communication with the channel decoder select circuit, wherein at least one of the plurality of channel decoder circuits is configured to provide a pseudo bit error measurement feedback signal to the maximum ratio combiner circuit;

wherein at least one maximum ratio combiner circuit is configured to receive the wireless signals from each of the plurality of communication channels and wherein the each of the plurality of channel decoder circuits are configured to receive the wireless signals from each of the plurality of communication channels.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis B. Odom whose telephone number is 571-272-3046. The examiner can normally be reached on Monday- Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Curtis Odom
December 9, 2007